

OHIO AGRICULTURAL EXPERIMENT STATION
Vegetable Crops Substation, Marietta, Ohio

DEPARTMENT OF HORTICULTURE MIMEOGRAPH SERIES NO. 215
January 10, 1961

SWEET CORN VARIETY TRIALS - 1960
Marietta, Ohio

Walter N. Brown*

In the 1960 sweet corn trials at Marietta thirty varieties were evaluated for fresh market in single row plots replicated five times. Each plot consisted of 21 hills spaced 18" in rows spaced 36". Four kernels per hill were planted with a hand jabber on May 13. Stand counts were made at the 2-3 leaf stage to determine germination, later the seedlings were thinned to two plants per hill permitting a maximum stand of 19,360 plants per acre. A cover crop of barley was plowed down and 600 lbs/A of 10-10-10 was drilled and disced in prior to planting. One side-dressing of 100 lbs/acre of ammonium nitrate was applied when plants were 12" to 18" high. Plants were not sprayed for control of flea beetle, corn borer, or corn ear worm. First harvest made July 26, 1960.

For the yield records only marketable size ears were included, however, some ears damaged by earworm were included, since it was assumed that insects could have been controlled by the use of suitable treatments.

The symbols and rating systems used are as follows:

Average Depth of Kernel: Average length of 3 kernels from center section of 3 ears selected at random from each plot.

Color of Kernel: LY = Light yellow, MY = medium yellow, DY = dark yellow;
B = bright, I = intermediate, D = dull.

Ease of Snapping: 1 - very difficult to 5 - easily snapped.

Shanks: 1 - long, over 6 inches to 5 - short 1 inch or less.

Flag Number: 1 - none to 5 - over eight.

Flag Length: 1 - less than 2 inches to 5 - over eight inches.

Tip Cover: 1 - exposed to 5 - long, extending 3 inches or more.

Silk Color: 1 - dark brown to 5 - clear or white.

Husk Color: 1 - light green and dull to 5 - dark glossy green.

Husk Tightness: 1 - loose to 5 - tight.

General Uniformity: 1 - poor to 5 - excellent.

5

SOURCE OF SEED

| <u>Code</u> | <u>Source</u> |
|----------------|--|
| B ₁ | W. Atlee Burpee & Co., Huntington Park at 18th St., Philadelphia 32, Pa. |
| F ₁ | Ferry-Morse Seed Co., P.O. Box 254, Racine, Wisc. |
| H ₁ | Joseph Harris Co., Inc., Moreton Farm, Rochester 11, N.Y. |
| H ₂ | Holmes Seed Co., 1017 9th St., S.W., Canton 11, Ohio |
| L ₁ | Livingston Seed Co., 880 Kinnear Rd., Columbus 12, Ohio |
| L ₂ | Letherman's Seed Co., 501 McKinley Ave., N.W., Canton 2, Ohio |
| M ₁ | Michael-Leonard (SRS) P.O. Box 987, Davenport, Iowa |
| R ₁ | Robson Quality Seeds, Inc., Hall, N.Y. |
| R ₂ | Rogers Brothers Seed Co., P.O. Box 30, Idaho Falls, Idaho |

GENERAL COMMENTS

Golden Hybrid G 101 - in Marcross season with better flavor and quality, high yielding with better tolerance to bacterial wilt, attractive in husk, 12 rows.

Northernbelle - (Carmelcross plus one maturity) should be used in trial where a higher rowed narrower kernel ear type is desired because of its consistent yielding ability and good quality.

Sugar King - a good narrow kernel, high quality hybrid maturing between Northernbelle and Gold Cup, matures with Asgrow Golden 22.

Golden Hybrid R-8-is a high quality, high yielding 12-14 rowed hybrid, very attractive in the husk. It follows Golden Security in maturity and shows good resistance to Helminthosporium blight.

Golden Sensation - in the above maturity range should be tried where a 14-16 rowed ear is desired, its excellent quality and high yields are worthy of note.

¹Department of Horticulture, Ohio Agricultural Experiment Station, Columbus 10, Ohio.

SWEET CORN VARIETY TRIALS - MARIETTA, OHIO, 1960

| Row No. | VARIETY and Lot Number | | Source | Days to First Harvest | Marketable Yield/Acre | | Average Weight of Ears Unhusked | Average Length of Ears Husked | Average Diameter of Ears Husked | Percentage of Ears Having Given Number of Rows of Kernels | | | | | | | | Average Depth of Kernel | Color Kernel | Ear Smut | Ear Worm | Ease of Snapping (1-5) | Shanks (1-5) | Flag Number (1-5) | Flag Length (1-5) | Tip Cover (1-5) | Silk Color (1-5) | Husk Color (1-5) | Husk Tightness (1-5) | General Uniformity (1-5) |
|----------------|---------------------------|-------------|----------------|-----------------------|--------------------------|---------------|------------------------------------|----------------------------------|------------------------------------|---|----|-----|----|----|----|----|------|----------------------------|--------------|----------|----------|------------------------|--------------|-------------------|-------------------|-----------------|------------------|------------------|----------------------|-----------------------------|
| | | | | | Dozens of Ears | Weight (Tons) | | | | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Doz. | Tons | Lbs. | In. | In. | % | % | % | % | % | % | % | mm | | % | % | | | | | | | | | | | |
| 1 | North Star | 1862F | H ₁ | 74 | 1629 | 7.0 | .72 | 7.1 | 1.8 | 5 | 20 | 75 | - | - | - | - | 9.33 | MYB | 0 | 41.1 | 5 | 4 | 3 | 4 | 3 | 4 | 4 | 2 | 3 | |
| 2 | Gold Crest | 1-5595 | L ₂ | 74 | 1629 | 5.2 | .53 | 7.2 | 1.6 | - | 15 | 85 | - | - | - | - | 8.0 | MYB | 0 | 34.3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | |
| 3 | Golden Beauty | 1849T | H ₁ | 75 | 1644 | 6.1 | .62 | 7.4 | 1.7 | - | - | 95 | 5 | - | - | - | 8.33 | MYB | 0 | 35.0 | 3 | 3 | 2 | 2 | 4 | 3 | 3 | 3 | 4 | |
| 4 | Seneca Sunbeam | 1019LF | R ₁ | 75 | 1229 | 5.4 | .73 | 7.6 | 1.7 | - | 15 | 70 | 15 | - | - | - | 9.0 | MYI | 0 | 36.3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | |
| 5 | Morning Sun | 1275 | H ₂ | 76 | 1444 | 6.2 | .71 | 7.7 | 1.8 | - | - | 60 | 30 | 10 | - | - | 9.67 | LYI | 0 | 29.9 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 2 | 4 | |
| 27 | Early Sunglow | 1-8748 | L ₁ | 76 | 1583 | 4.9 | .52 | 6.6 | 1.6 | - | - | 95 | 5 | - | - | - | 9.67 | DYB | 0 | 32.5 | 5 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | |
| 10 | Northern Belle | 1826 VI-F | H ₁ | 77 | 1767 | 7.9 | .75 | 7.6 | 1.8 | - | - | 10 | 25 | 55 | 10 | - | 8.33 | LYB | 0.5 | 29.1 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | |
| 9 | Northerncross | 1844T | H ₁ | 77 | 1652 | 7.8 | .78 | 8.1 | 1.8 | - | - | 65 | 35 | - | - | - | 8.33 | MYI | 0 | 34.6 | 4 | 3 | 4 | 5 | 3 | 4 | 4 | 4 | 4 | |
| 6 | Golden Hybrid | G-101 88038 | R ₂ | 77 | 1729 | 7.2 | .70 | 7.2 | 1.7 | - | - | 100 | - | - | - | - | 8.33 | MYI | 0 | 42.2 | 5 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | |
| 7 | Garden Gold | 28983 | F ₁ | 77 | 1514 | 6.3 | .69 | 7.7 | 1.7 | - | - | 100 | - | - | - | - | 7.33 | MYB | 0 | 31.1 | 4 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 4 | |
| 8 | Carmelcross | 1847-T | H ₁ | 77 | 1552 | 6.7 | .73 | 8.1 | 1.7 | - | - | 80 | 20 | - | - | - | 8.67 | MYI | 0 | 35.0 | 4 | 3 | 3 | 4 | 4 | 2 | 4 | 4 | 3 | |
| LSD @ 5% level | | | | | 219 | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | |

| Row No. | VARIETY and Lot Number | | Source | Days to First Harvest | Marketable Yield/Acre | | Average Weight of Ears Unhusked | Average Length of Ears Husked | Average Diameter of Ears Husked | Percentage of Ears Having Given Number of rows of Kernels | | | | | | | | Average Depth of Kernel | Color Kernel | Ear Smut | Ear Worm | Ease of Snapping(1-5) | Shanks (1-5) | Flag Number (1-5) | Flag Length (1-5) | Tip Cover (1-5) | Silk Color (1-5) | Husk Color (1-5) | Husk Tightness (1-5) | General Uniformity(1-5) |
|----------------|--------------------------------|--------|----------------|-----------------------|--------------------------|---------------|------------------------------------|----------------------------------|------------------------------------|---|-----|-----|----|----|----|----|----|----------------------------|--------------|----------|----------|-----------------------|--------------|-------------------|-------------------|-----------------|------------------|------------------|----------------------|-------------------------|
| | | | | | Dozens of Ears | Weight (Tons) | | | | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | | | | | | | | | | | | |
| | | | | | Doz. | Tons | | | | Lbs. | In. | In. | % | % | % | % | % | | | | | | | | | | | | | |
| 28 | Golden Security | 1-195 | L ₂ | 84 | 1805 | 7.9 | .73 | 7.7 | 1.6 | - | - | - | 15 | 50 | 30 | 5 | - | 8.0 | MYB | 0 | 18.3 | 4 | 2 | 5 | 4 | 4 | 3 | 4 | 4 | 4 |
| 22 | Honeycross | 6263 | B ₁ | 84 | 1690 | 7.8 | .63 | 7.9 | 1.8 | - | - | 5 | 40 | 40 | 15 | - | - | 8.33 | MYB | 0 | 13.2 | 4 | 2 | 5 | 5 | 4 | 4 | 4 | 3 | 5 |
| 23 | Surecross | 5143 | B ₁ | 84 | 1537 | 7.8 | .85 | 8.6 | 1.8 | - | - | 30 | 50 | 20 | - | - | - | 8.5 | MYB | 0 | 12.5 | 5 | 2 | 4 | 5 | 3 | 4 | 3 | 3 | 4 |
| 25 | Surecrop | 1851T | H ₁ | 84 | 1690 | 7.8 | .76 | 7.6 | 1.6 | - | - | - | 5 | 60 | 35 | - | - | 7.5 | LYB | 0 | 10.9 | 4 | 2 | 5 | 3 | 4 | 2 | 3 | 3 | 4 |
| 21 | Golden Hybrid R-8 | 88023 | R ₂ | 84 | 1744 | 7.0 | .67 | 8.4 | 1.5 | - | - | 50 | 40 | 10 | - | - | - | 8.0 | LYB | 0 | 11.6 | 3 | 2 | 4 | 5 | 3 | 4 | 4 | 4 | 4 |
| 19 | Deligold | 30681 | M ₁ | 84 | 1659 | 7.2 | .73 | 8.2 | 1.7 | - | - | - | 50 | 40 | 10 | - | - | 9.0 | MYI | 0 | 15.9 | 3 | 2 | 5 | 5 | 3 | 4 | 4 | 4 | 4 |
| 26 | Golden Sensation | 35782 | M ₁ | 87 | 1890 | 8.8 | .78 | 8.1 | 1.8 | - | - | 25 | 35 | 30 | 10 | - | - | 9.67 | MYI | 0 | 13.8 | 3 | 2 | 4 | 4 | 4 | 3 | 3 | 5 | 4 |
| 24 | Seneca Wampum | 1068F | R ₁ | 87 | 1744 | 8.6 | .82 | 7.9 | 1.8 | - | - | 40 | 40 | 10 | 10 | - | - | 9.67 | MYB | 0 | 16.7 | 4 | 2 | 5 | 5 | 4 | 3 | 4 | 4 | 3 |
| 29 | Golden Challenger | 1-9743 | L ₁ | 87 | 1667 | 8.3 | .83 | 8.3 | 1.8 | - | - | 85 | 15 | - | - | - | - | 10.5 | MYI | 0 | 15.5 | 4 | 2 | 4 | 5 | 4 | 3 | 4 | 3 | 4 |
| 30 | Aristogold Bantam Evergreen | 35476 | L ₁ | 87 | 1521 | 8.1 | .89 | 8.9 | 1.8 | - | - | 10 | 45 | 30 | 15 | - | - | 8.67 | MYB | 0 | 26.8 | 4 | 2 | 5 | 4 | 3 | 3 | 4 | 4 | 5 |
| LSD @ 5% level | | | | | 219 | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | |